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PEANUT MARKETING

Reprinted from Agricultural Markets in Change,
Agricultural Economic Report 95

TRI-AGENCY PLANNING ROOM

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ECONOMIC RESEARCH SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Introduction	369
Interrelations between production and marketing.	371
Utilization and product development.	372
Changes in market structure and practices.	373
Farm-retail spreads.	377
Future prospects	377
Summary.	379
Literature cited	380

October 1966

PEANUT MARKETING

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INTRODUCTION

The commercial development of the peanut industry began with the erection of a peanut cleaning plant in New York City in 1876. Peanut cleaners soon found, however, that eastern Virginia was the most logical location for the industry; therefore, they concentrated in the Virginia-North Carolina growing area.

At the beginning of the 20th century, peanut production began to move into the Southeast and the Southwest, following the advance of the boll weevil across the Cotton Belt. Since peanuts could be sold as a cash crop, hogged-off (hogs turned into peanut fields), or used for hay, they made an excellent replacement for the weevil-devastated cotton. The first modern shelling plant in the Southwest was built in 1907 in Texas, and by 1917 the peanut shelling industry was firmly established in both the Southwest and the Southeast producing areas.

In 1939, 121 peanut shelling plants were reported in operation with 65 in the Southeast, 22 in the Southwest, and 34 in the Virginia-North Carolina area (2). 1/ Fewer than 90 shelling plants were active in 1965 in all areas.

Peanuts, which were one of the basic crops under the Agricultural Adjustment Act, were put under Government programs in the thirties. Since that time, Government programs affecting peanut production and marketing have been in effect almost continuously. The pre-war programs were designed to support the price of peanuts by diverting a part of the crop into crushing for oil and meal. The Government attempted to further reduce the size of the crop by paying farmers to use part of their peanut acreage for soil conserving crops. These payments were made beginning with the 1936 season. In the 1938 and subsequent programs, acreage diversion payments were based on compliance with acreage allotments.

As a result of these programs, the percentage of the available supply of peanuts crushed for oil increased from a maximum of 8 percent before their enactment to an average of about 20 percent in the 1934-41 period. But the early programs were ineffective in controlling peanut acreage and production, both of which increased quite rapidly from 1934 to 1941. Peanut acreage harvested during this period rose from 1.5 million to 1.9 million acres, while production rose from 1 billion pounds to 1.5 billion.

The early programs were more successful in raising prices, however. In 1931, the average price received by farmers for peanuts reached a depression low of 1.7 cents per pound, or 25 percent of parity (1910-14 prices). Peanut prices recovered slightly in 1932, rising to 30 percent of parity. In 1933, with the advent of the first Government program, the farm price rose to 53 percent of parity; and from 1934 to 1940, the farm price fluctuated between 54 and 64 percent of parity.

When the United States entered World War II, the emphasis of Government programs shifted from an attempt to restrict the supply of peanuts to an effort to

1/ Underlined numbers in parentheses refer to Literature Cited, p. 380.

expand peanut production to help alleviate the shortage of vegetable oils. Acreage goals were expanded to 5 million acres in 1942 (3.4 million acres were actually harvested), and in 1943 all marketing quotas and acreage allotments were terminated. Prices were supported at 90 percent of parity during most of this period. From 1944 to 1946, farm prices equaled or exceeded parity.

In the years immediately following World War II, there was an acute worldwide shortage of vegetable oils. During this period from 1946 to 1948, the Government continued to encourage peanut production. Because of the stimulus of the wartime and immediate postwar Government policies, peanut production and the number of shelling plants grew tremendously, both hitting a peak in 1948.

Acreage restrictions and marketing quotas were reestablished in 1949. From 1949 to 1955--with the exception of the 1951 crop, which was supported at 88 percent of parity--prices were supported at 90 percent of parity. Between 1955 and 1965, support prices varied from 75 to 86 percent of parity.

With the return of production controls, both peanut acreage and production fell throughout the early fifties. This rapid decline in the quantity of peanuts produced caused vast overcapacity in the wartime-g geared shelling industry. Consequently, sheller profit margins were severely squeezed, and some marginal plants were forced out of business.

The acreage allotment program, coupled with rather high price supports, probably influenced the rapid rate of technological advance in peanut production after World War II. With land restricted as an input for peanut production, farmers have substituted other inputs--such as fertilizer and pesticides--for land. This, plus the introduction of new varieties, has led to much higher yields per acre.

In the early development of the peanut industry, large quantities of peanuts, particularly in the Southeast, were hogged-off. Most of the rest reached the consumer in the roasted-in-shell form. By 1960, over 10 times as many peanuts reached the consumer shelled as in-shell. Less than 10 percent of the peanut acreage was hogged-off in 1960, compared with 20 percent in 1949.

The peanut crop had a farm value of nearly \$285 million in 1965. In addition to farm value, the services performed by the marketing system added an estimated \$741 million to the value of farmers' stock peanuts. The total output of the peanut industry, including both production and marketing services, was approximately \$1,026 million for the 1965 crop.

Although farm receipts from peanuts are only a small fraction of total U. S. farm receipts, peanuts are the third most important cash field crop in the Southeast. Tobacco and cotton are the only field crops that surpass peanuts as a source of cash farm income in this region.

Besides being a major source of farm income in the South, peanuts provide a major source of seasonal employment in many rural southern towns. A peanut shelling plant may employ from 1 to 40 persons on an annual basis and from 20 to 200 or more persons on a seasonal basis for 3 to 6 months. Most shelling plants are located in rural towns, and in many of these towns, they are the leading or only industry. The normal employment season runs from early fall to early spring. As this is the normal off-season for much farmwork in the area, peanut shelling plants provide a means of extending the period of productive employment for many rural workers. For this reason, the peanut shelling industry makes a vital contribution to the rural Southern economy.

INTERRELATIONS BETWEEN PRODUCTION AND MARKETING

Since World War II, several technological advances in peanut production have had a marked impact on the method of marketing farmers' stock peanuts. Production advances such as the development of higher yielding varieties and improved cultural practices have influenced the marketing system. Mechanical harvesting and curing of peanuts, however, have had the greatest and most direct impact on marketing.

Before the development of mechanical harvesting methods, peanuts were dug with peanut diggers and then stacked in the field by hand to cure. After curing, which required from 4 to 6 weeks, the peanuts were hauled to a stationary thresher for picking. They were then hauled to the first buyer's receiving station to be graded and sold.

Under the mechanical system of harvesting, the freshly dug peanuts are raked into windrows to cure. A combine then picks them directly from the windrow. This windrow-combine harvesting system is admirably suited to bulk handling of the peanuts. But when the system was first introduced, growers in the Virginia-Carolina and the Southwest areas were unable to take full advantage of the labor-saving potential of bulk harvesting because the warehouses could not handle peanuts in bulk. All the storage facilities were designed to receive and store bagged peanuts. Consequently, the full exploitation of this production innovation was delayed until the marketing system adapted its own operations to the new techniques.

A North Carolina study (7) shows that, when bulk handling replaces bag handling, there is a total saving of about \$7.00 per acre, including savings in labor, equipment, and bags. Labor requirements for harvesting are reduced from 28 man-hours per acre to 4.3 man-hours per acre when the handstacking and stationary picking system is replaced by the bulk-mechanical system. The same study estimates that labor requirements for moving peanuts from farm to first receiver are reduced from 3.2 man-hours to as few as 1.3 man-hours per acre.

The widespread introduction of artificial drying of farmers' stock peanuts has gone hand-in-hand with the development of mechanical harvesting. These two innovations have enabled farmers to move the bulk of the peanut crop of one type in an area into the hands of first buyers within 3 weeks after digging. Such accelerated movement means that first buyers must be in a position to purchase their entire requirements in a much shorter period than previously. Consequently, the need for adequate financing has increased.

The marketing system has had to modernize and expand its facilities to meet the requirements of the new production technology. Initially, existing bag storage facilities were converted to bulk operation by the installation of bulk handling equipment. But these storage facilities had inadequate capacity to handle the peak crop movement. Recently, therefore, many new storage facilities have been built, especially designed to handle farmers' stock peanuts in bulk.

The new harvesting and drying technology has also affected the market quality of peanuts. There has been a quality improvement from the farmer's standpoint, since the reduced time required for harvesting and curing means less loss to insects, rodents, molds, and weather damage. The picture is somewhat different from the sheller's and the processor's view, however. High temperatures used in the artificial drying process have in the past caused problems of skin slippage on peanut kernels, thus lowering the grade of shelled peanuts by increasing the quantity of split kernels.

A deterioration of flavor has also been associated with the high artificial drying temperatures. Improved techniques, however, have largely overcome the past problems associated with artificial drying. But shellers in the Virginia-North Carolina area have complained that the percentage of roasting stock peanuts from the predominant variety has declined because of shell breakage since the introduction of the new harvesting techniques.

UTILIZATION AND PRODUCT DEVELOPMENT

The aggregate consumption of all peanuts has increased over the years as a result of population growth and increasing per capita consumption. Per capita annual consumption of shelled peanuts has slowly trended upward from about 4 pounds in 1939 to 5 pounds in recent years.

There have been rather significant changes in the form in which peanuts are consumed. Peanut butter consumption has increased dramatically. During the 1951-1964 period, the quantity of shelled peanuts used for peanut butter manufacture increased from 276 million pounds to 480 million pounds. The 1964 figure was almost 55 percent of all edible peanuts used in primary products. This growth in peanut butter manufacture has been paralleled by a marked expansion in the production of runner peanuts. Runners have become the dominant type of peanuts used in peanut butter, accounting for over half of all those used in this outlet in recent years.

The absolute quantity of peanuts used in the other major shelled outlets--salted nuts and candy--has increased, but the relative amounts of peanuts going into these outlets have declined slightly since 1951. Both Spanish and Virginia peanuts are used for salting, with Virginias accounting for about 70 percent of the total. All three types are used extensively for candy, with Spanish making up over 50 percent of the total. Figure 1 shows the quantities of runner, Virginia, and Spanish peanuts used for peanut butter, candy, and salting from 1945 through 1964.

The percentage of peanuts consumed as roasted in-shell has been declining consistently. In 1961, slightly less than 6 percent of all farmers' stock peanuts reported used in edible products were marketed in this form. These were virtually all Virginia and Valencia peanuts.

Since World War II, there has been a proliferation of new snack products introduced on the American market. Salted peanuts, peanut candy, and roasted-in-shell peanuts, which together account for nearly half of edible peanut sales, are all well-established snack items. The peanut industry over the last 15 years has met, and will continue to meet, stiff competition in this market from nonpeanut products.

The peanut industry itself has been active in new-product development and promotion. A 1952 study by the U.S. Department of Agriculture reports on several peanut products that were newly developed at that time (4). These new peanut products have met with varying degrees of success in the market. Peanut butter sandwiches, which are sandwiches made from peanut butter and cheese-flavored crackers, have had the greatest success of all new peanut snack products introduced.

The most recently marketed peanut innovation in the snack field is dry-roasted salted peanuts, which are similar to ordinary salted peanuts except that they are roasted by a dry process rather than in oil. This product appears to be quite successful.

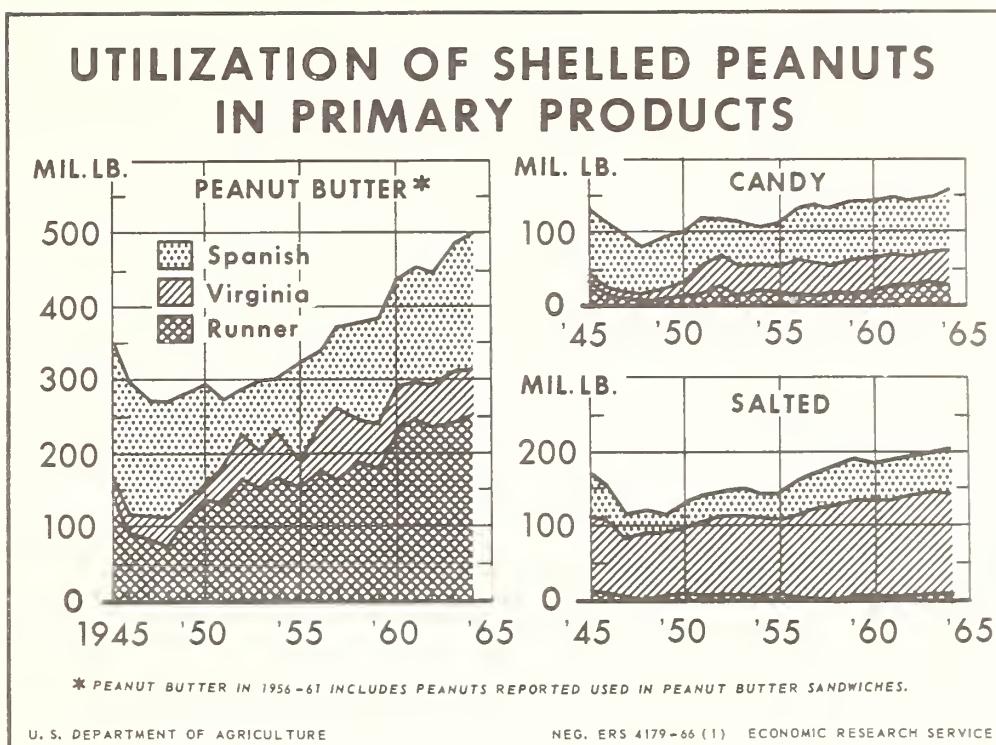


Figure 1

The U.S. Department of Agriculture recently developed a process for making another new product, low-calorie peanuts. ^{2/} In this process up to 80 percent of the oil can be removed from the peanut kernels by hydraulic pressing. The pressed kernels are then reconstituted to their original size and shape by placing them in hot water for a few minutes. They may then be roasted, either by a dry or an oil roasting process. Since low-calorie peanuts have not yet been produced commercially, their market acceptance is still unknown. However, because low-calorie peanuts may contain as little as one-third of the calories in ordinary salted peanuts, this product appears to have a large potential market among weight watchers. Industry has shown a great interest in this process, and is now actively participating in its development.

CHANGES IN MARKET STRUCTURE AND PRACTICES

In the latetwenties and earlythirties, nearly all shelled peanuts were held in cold storage in terminal markets. Manufacturers and merchandising brokers usually laid in a full year's supply early in the season. Chicago, which was the leading peanut storage center, commonly had as many as 20 million or more pounds of peanuts in storage in its warehouses.

By the latethirties, peanut marketing practices had undergone considerable change (2). As storage in production areas gained in importance, terminal markets

^{2/} U.S. Dept. Agr., Southern Regional Research Laboratory. Process To Produce Low-Calorie Peanuts. Paper presented at Lo-Cal Peanut Meeting, New Orleans, La., July 27, 1965.

lost their dominant position in providing cold storage for shelled peanuts. By 1938, the quantity in cold storage in Chicago was rarely over 5 million pounds at any time. Shellers had found that holding peanuts in or near the production area gave them a greater flexibility in shipment, allowing them to take advantage of current price and demand conditions in various markets. Another factor adding to the growth of southern cold storage was the relatively low storage-in-transit rates that the railroads had introduced for several southern cities. Early in 1966, over 90 percent of the shelled peanuts were being held at southern storage points and shipped to terminal markets on order.

Manufacturers and merchandising brokers in terminal markets had also changed their buying practices by the late thirties. They had begun to hold only a working inventory of peanuts in stock at any given time. They made purchases in small lots of 5 cars or less throughout the season, rather than in large blocks of up to 100 cars at a time. Less-than-carlot purchases became common in the Virginia-Carolina area, and trucks began to be important for transporting peanuts to terminal markets in all areas.

The Government-induced World War II expansion of peanut production put a severe strain on existing shelling facilities. This spurred the construction of shelling plants during, and immediately after, the war until 1948.

When production controls were reapplied in 1949, the shelling industry found itself in the uncomfortable position of having a large amount of excess capacity. Peanut acreage fell from 3.3 million acres in 1948 to 2.3 million acres in 1949, and production of farmers' stock peanuts fell from 2.3 billion pounds in 1948 to less than 1.9 billion pounds in 1949. Harvested acreage and production continued to decline through the early fifties to an average of 1.5 million acres producing about 1.5 billion pounds by the midfifties. The minimum legal acreage allotment was establishment at 1.6 million acres in 1954 and has been at this level since then. Establishment of acreage allotments resulted in some shelling plants closing their doors. Total production has been increasing consistently since the midfifties as a result of increasing per acre yields.

There has been a definite trend toward fewer and larger shelling firms. Many small independent firms have gone out of existence since 1948. In 1961, an Economic Research Service study showed that there were only 112 shelling plants still in existence, and only 99 of these were reported as actively engaged in commercial operations. This compares with 176 active shelling plants reported in 1948. Fewer than 90 shelling plants were active in 1965. During the 1960-61 season the eight largest firms controlled one-third of the shelling plants in operation. These same eight firms handled over 50 percent of the 1960 peanut crop. Moreover, the 17 smallest firms handled less than 3 percent of the crop.

Figure 2 illustrates the degree of concentration in the peanut shelling industry in 1960-61. The percentage of shelling firms is plotted on the horizontal axis and the percentage of crop purchased on the vertical axis. If there were no concentration in the industry, the plot of percentage of crop purchased against percentage of firms would be the dotted diagonal line. Ten percent of the firms would control 10 percent of the crop, and so on. The deviation of the actual plot from this diagonal indicates the extent of concentration within the industry. In the peanut-shelling industry, the bottom 26 percent of the firms purchased only 3 percent of the 1960-61 crop, while the top 12 percent of the firms purchased 50 percent of the crop.

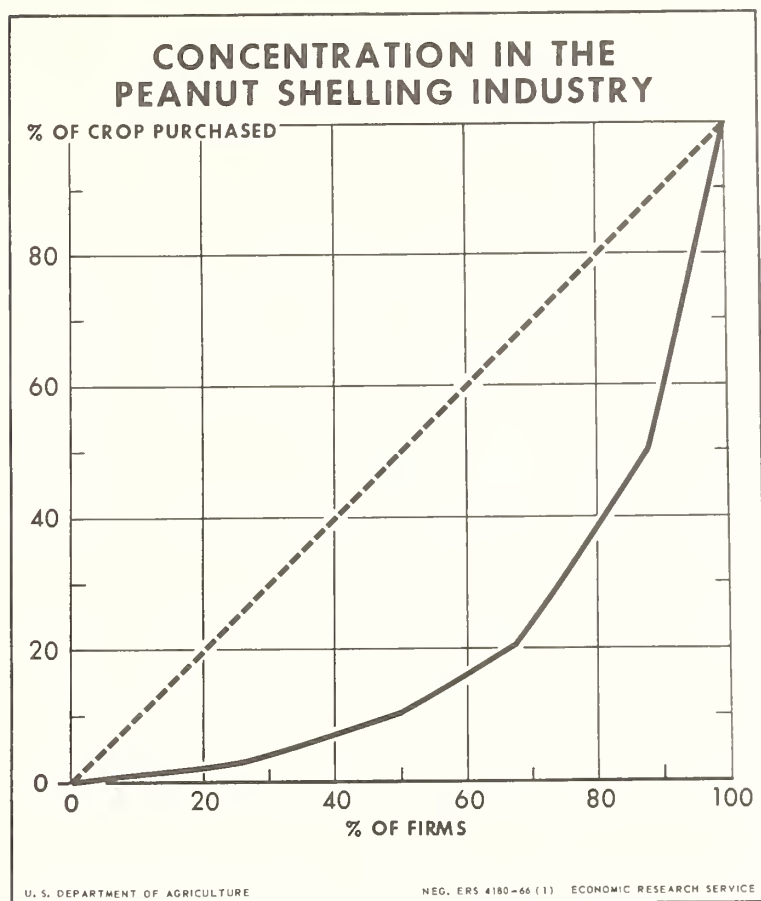


Figure 2

In addition to this trend toward concentration in the shelling industry, there has been a trend toward horizontal and vertical integration of firms. Within the past few years, large multiproduct food corporations have purchased two shelling firms. Some small and some medium-size shelling plants have been acquired by larger firms engaged in the manufacture and distribution of peanut products.

Corporations are the dominant form of business organization in the shelling industry. They accounted for over two-thirds of the firms actively shelling in 1960. In the same year, proprietorships and partnerships dominated the remaining one-third of active peanut shelling firms, which included one farmer cooperative.

Shelling plants obtain the bulk of their farmers' stock peanuts from local receiving stations or from first buyers. First buyers may be classified as independent--those who purchase peanuts for their own account from farmers and resell to shellers; salaried--those who are employees of specific shellers; and commission buyers--those who purchase peanuts for one or more shellers on a commission basis. Commission buyers are the most common. In 1960, they totaled 97 percent of all first buyers in the Virginia-North Carolina area. Buyers working on a straight salary made up about another 3 percent of the first buyers in that area.

Shelling plants in the Virginia-Carolina area reported obtaining 69 percent of their supplies from commission buyers in the 1960-61 season. This compares with shellers in the Southwest, who received 60 percent of their farmers' stock peanuts from this source, and those in the Southeast, where shellers obtained only 31 percent of their supplies from commission buyers during the same season. Shelling plants themselves were the most important first buyers in the Southeast, having

obtained 45 percent of their supplies directly from growers in 1960-61. Independent buyers are rare, with only one in the Virginia-Carolina area in 1960 (1). In the 1960-61 season, peanut shelling plants in the Virginia-Carolina area obtained 1 percent of their supplies from independent buyers, whereas those in the Southeast obtained 9 percent of their supplies from this source. Table 1 shows the quantities and percentages of peanuts obtained by shelling plants from various sources for the 1960-61 season.

First buyers depend heavily on grower goodwill and friendship. In a 1958 survey of peanut growers in the Virginia-North Carolina area, friendship with the buyer was the most frequently mentioned factor influencing choice of outlet (5). It was specified by over 40 percent of all growers interviewed. Nearly 37 percent of the growers listed "Service to growers" as a factor influencing choice of outlet. About 12 percent said they customarily sold at a particular outlet. Less than 12 percent of the growers mentioned price as a factor influencing their choice of outlet. Apparently most growers believe that all buyers pay similar prices.

Most first buyers provide some service to growers. This service consists mainly of selling production supplies to growers and purchasing commodities other than peanuts from them. These functions enable the buyers to utilize their labor and facilities on a year-round basis.

Receiving stations traditionally have used their buildings for purposes besides peanut storage. Special handling and storage facilities are not required for bagged peanuts, which can be stored in general-purpose warehouse structures. First buyers' building facilities in Virginia-North Carolina were used, on the average, 7 weeks for peanut buying, 10 weeks for peanut storage, and 21 weeks for other purposes during the 1958 season (5).

Shifting from bag to bulk handling has forced receiving stations to install specialized equipment and facilities. The specialized nature of these facilities limits their usefulness for purposes other than receiving and storing peanuts. This fact, coupled with the large investment required for bulk facilities and the economies of scale inherent in bulk operations, will have a large impact on the economic structure of the first buyer phase of peanut marketing.

According to a North Carolina State study, total investment required for bulk receiving stations storing peanuts with optimum techniques ranges from about \$25,000 to over \$1,200,000. This range begins with plants designed to operate 200 hours a season at 25 hundredweight per hour and ends with stations designed to operate 600 hours at a rate of 1,000 hundredweight per hour (5). Average annual costs for operating bulk receiving stations storing peanuts range from 94 cents per hundredweight for smaller stations designed to operate at a 25-hundredweight-per-

Table 1.--Buying methods of peanut shellers in purchasing farmers' stock peanuts, by areas, 1960-61

Buying methods	Virginia-Carolina		Southeast		Southwest		Total	
	Tons	Percent	Tons	Percent	Tons	Percent	Tons	Percent
Direct from growers:								
By plants (as first buyers):	46,764	26	141,586	45	20,327	14	208,677	33
Salaried representatives....	6,523	4	30,151	10	27,210	19	63,884	10
Commissioned representatives:	122,505	69	99,052	31	88,569	60	310,126	48
Independent buyers.....	1,350	1	28,869	9	426	1/	30,645	5
Commodity Credit Corporation..	125	1/	14,617	5	9,730	?	24,472	4
Others.....	---	---	88	1/	602	1/	690	1/
Total.....	177,267	100	314,363	100	146,864	100	638,494	100

1/ Less than one-half of 1 percent.

hour rate, to 43 cents per hundredweight for larger stations designed to operate at a rate of 1,000 hundredweight per hour. Very little reduction in either investment cost or annual average cost was realized beyond an operating rate of 300 hundredweight per hour.

The implication of this fact on market structure is that when the transition from bag to bulk handling is completed there will be fewer buying stations, and these will be much larger than the old bag stations. Some operators of bag buying stations will have to find alternative employment for their facilities and labor.

FARM-RETAIL SPREADS

Farmers received 34 percent of the average retail price of a 12-ounce jar of peanut butter in the 1965 crop year. (3) This was considerably less than the farmers' share (39 percent) of the market basket of all farm food products in 1965. The smaller share can be attributed largely to the amount of processing required to produce peanut butter. Marketing costs are a reflection of the services added to farm commodities to convert them into consumer products. Highly processed goods, such as peanut butter, can be expected to have higher marketing margins than products that require little or no processing.

Shellers received the smallest share, 5 percent of the consumers' peanut butter dollar. The manufacturers' margin as a percentage of retail price was nearly 36 percent in 1960-61. The wholesale-retail margin was just under 31 percent of the retail price.

Peanut butter marketing costs are influenced by the type of retail outlet, amount of brand promotion, location of market, and container size.

Chainstores usually sell peanut butter at a lower price than small independent stores. The most frequent difference between these two types of stores in the price per 12-ounce jar for the 3 crop years 1958-59, 1959-60, and 1960-61 was 2 cents.

Nationally advertised brands of peanut butter are priced higher than nonadvertised brands. In 1960-61, the most frequent price of advertised brands was 8 cents per 12-ounce jar higher than the comparable price of nonadvertised brands.

The price of peanut butter in any consumer market is directly correlated with the distance of that market from the peanut producing areas. In a study of peanut butter prices in eight major U. S. cities, Portland, Oregon, which was the greatest distance from producing areas, had consistently higher retail prices than the average. Philadelphia and Baltimore, which were located near a major area of peanut production, had retail prices lower than the 8-city average.

Container size is a major factor in determining the retail price of peanut butter. The average price of 12 ounces of peanut butter in 1960 was 46.9 cents in 8-ounce jars, 41.8 cents in 12-ounce jars, and 35.1 cents in 18-ounce jars.

FUTURE PROSPECTS

The future growth and development of the market for peanuts depends largely on population growth, product development, product quality, and merchandising and promotional practices of the industry.



A modern bulk storage peanut warehouse. Bulk storage of farmers' stock peanuts has largely replaced bag storage.

Even if per capita consumption of peanut products were to stabilize at the present level, the total market would increase because of population growth. The gradual increase in per capita peanut consumption that has been apparent over the past two decades is expected to continue into the foreseeable future. Thus, it is expected that the total market for peanuts and peanut products will increase at a greater rate than population.

Changes in the geographical distribution of population will affect the cost of marketing. The population of the Western region, for instance, is expected to increase at a greater rate than that of the Nation as a whole. Because of the distance of this region from the major peanut producing areas, the total marketing bill for peanuts may increase faster than that for other foods.

Although per capita peanut consumption is expected to increase, it will be necessary for the industry to take positive steps in the areas of product development, quality improvement, and merchandising to assure that this increase actually comes about.

Peanuts have faced, and will continue to face, increasing competition from other products. This is especially true in the growing snack-food market. To share in this market growth, the peanut industry must match its competition in new-product development and promotion. This has been done in the past, and current development work on new products, such as low-calorie peanuts, indicates that the industry will continue to meet its competition in placing new and improved products on the market. The continued entrance of major food processing concerns into the peanut products field will undoubtedly accelerate product development and promotional activities.

Quality improvement is another device that will help the industry retain or expand its market acceptance. This becomes even more important in light of the recent interest in toxic molds in peanuts.

A marketing agreement that incorporates the quality-control aspects of the 1964 price support program has been initiated to control the quality of peanuts going into the edible commercial trade. This agreement, which is effective with the 1965 crop, should be especially effective in insuring that only high-quality peanuts find their way into edible products. The U. S. Department of Agriculture and State Experiment Stations also have undertaken several research projects to isolate factors affecting quality; these include determining the causes of molds, and developing procedures for improving the wholesomeness of peanuts. Another move toward quality improvement is the U. S. Department of Agriculture's shelled No. 2 peanut purchase program, under which shellers deliver lower quality peanuts to the Commodity Credit Corporation and market only the better quality peanuts through commercial channels.

SUMMARY

Peanuts became an important crop in the South following the boll weevil advance across the Cotton Belt. Since peanuts could be sold as a cash crop, hogged-off, or used for hay, they made an excellent replacement crop for cotton. Peanuts were included under Government price-stabilizing programs in the 1930's. Since that time they have been under some form of Government program almost continuously.

The development of mechanized harvesting and drying techniques for peanuts has had a major impact on the peanut marketing system. More rapid movement

of peanuts from farm to market has reduced loss due to insects, rodents, mold, and weather damage. This has resulted in a significant improvement in the quality of farmers' stock peanuts. In addition, the marketing system has had to adapt its operations to the new technology by providing adequate bulk-storage facilities in some areas. During the last decade, many new farmers' stock storage structures have been built that are especially designed to handle bulk peanuts.

Per capita consumption of shelled peanuts has increased from about 4 pounds in 1939 to 5 pounds in recent years. Population growth has also been a factor in the growth in aggregate consumption of peanuts. There has been a significant change in the form in which peanuts reach the consumer. The consumption of peanuts as peanut butter has increased dramatically since 1951, while the quantity of peanuts consumed as salted nuts and candy has increased in absolute terms but decreased as a percentage of total peanuts marketed. Roasted-in-shell peanuts now account for less than 6 percent of all farmers' stock peanuts used in edible products.

Salted peanuts, peanut candy, and roasted-in-shell peanuts, which are all well-established snack items, have had to meet extensive competition from new products in this growing field since the end of World War II. The peanut industry itself has been active in developing new snack products. Peanut butter sandwiches have been very successful in this field. Dry roasted peanuts and low-calorie peanuts are new snack products that should have a large market among the diet conscious.

Since the late twenties, there have been several major changes in the structure and practices of the peanut marketing system. During the midthirties southern cities became dominant as cold storage sites for shelled peanuts. Advantages to both shellers and product manufacturers, as well as the introduction of storage-in-transit rail rates, were major reasons for the shift in cold storage location.

World War II caused an increase in peanut production that resulted in an expansion of the shelling industry. When production was curtailed after the war the industry was overexpanded, and some shelling plants were forced out of business. Partly as a result of these plant closings there has been a trend toward concentration in the shelling industry. There has also been a move toward horizontal and vertical integration as multiplant peanut shelling firms have purchased some small and some medium-size shelling firms.

Farmers received 34 percent of the retail price of a 12-ounce jar of peanut butter in 1965, slightly less than the 39 percent that was the farmers' share of the market basket of all farm foods in 1965. The amount of processing required to produce peanut butter accounts for a large part of the difference. Peanut butter marketing costs are influenced by type of retail outlet, location of market, amount of brand promotion, and container size.

Continued increase in per capita consumption of peanuts is expected; but it will be necessary for the industry to take positive action in product development, quality improvement, and merchandising and promotional activities to bring this about.

LITERATURE CITED

- (1) Biggs, G. W., King, R. A., and Jones, E. W.
1962. Buying Farmers' Stock Peanuts in the Virginia-North Carolina Area.
U.S. Dept. Agr. Mktg. Res. Rpt. 555, Oct.

- (2) Clay, H. J.
1941. Marketing Peanuts and Peanut Products. U.S. Dept. Agr. Misc. Pub. 416, Sept.
- (3) Farnworth, V. M.
1963. Prices, Marketing Margins, and Uses of Peanuts in Peanut Butter. U.S. Dept. Agr. Mktg. Res. Rpt. 624, Dec.
- (4) Gilliland, C. B., and Smith, T. B.
1952. Peanut Snack and Peanut Spread: Potential New Products. U.S. Dept. Agr. Mktg. Res. Rpt. 29, Dec.
- (5) Jones, E. W., and King, R. A.
1963. Economic Efficiency in Constructing and Operating Bulk Peanut Receiving Stations. N. C. State Univ. A. E. Inform. Ser. 107, Oct.
- (6) _____, King, R. A., and Biggs, G. W.
1963. Marketing Farmers' Stock Peanuts in the Virginia-North Carolina Area. U.S. Dept. Agr. Mktg. Res. Rpt. 595, Apr.
- (7) Pierce, W. H., and Mills, W. T.
1961. An Evaluation of a Mechanized System of Peanut Production in North Carolina. N. C. Agr. Expt. Sta. Bul. 413, Aug.

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